

# SWAMP

## SRWP presents: Water Quality Monitoring SWAMP Workshop

*9:30 - 4:00 Wed. - Fri. September 7 - 9, 2005*

Sacramento Regional County Sanitation District

10545 Armstrong Avenue, Room 170

Mather, CA 95655

The Sacramento River Watershed Program (SRWP) and the Surface Water Ambient Monitoring Program (SWAMP) are offering three days of workshops to provide training on water quality monitoring, quality assurance, and SWAMP data management. These three separate day-long workshops are described below. These workshops are open to anyone interested in conducting SWAMP-comparable monitoring and data management. Participants can register and attend one or more of the workshops.

**Workshop objectives:** Attendees will develop a better understanding of the planning documents required for their monitoring-related grant projects and the relationships between them; access to tools and resources to help with collection of scientifically defensible monitoring data; hands-on experience with implementing some basic concepts of the monitoring design; and training on the statewide CEDEN on-line database. Each day of the workshop builds on the previous so if you feel a need for training in all of the subjects, we encourage you to sign up for them all.

**Day 1: Water Quality Monitoring Design and Project Planning**—With a focus on thoughtful planning, we will go through the development of a monitoring program.

- Effectiveness Tracking and other requirements (PAEP/PMPP/PMAP, Monitoring Plan, QAPP, Project Report)

- Designing a monitoring project—question formulation, probabilistic/deterministic sampling design principles, choosing the “what, where, and when.”

- Statistical comparisons and power analysis
- Data representativeness and measurement quality
- Management of data for validation, retrieval, interpretation, and presentation
- Group exercises—Working on different monitoring project scenarios

**Day 2: Quality Assurance for Projects Comparable with SWAMP**—Day 1 and 2 should be taken together since the monitoring design training leads to the development of better Quality Assurance Project Plans (QAPPs).

- Monitoring quality assurance overview

- The QAPP Preparation and Review Process—The 24 elements of a QAPP and the use of the SWAMP Quality Assurance Management Plan (QAMP) - comparable QAPP template

- Group exercise - development of selected QAPP elements for a case study

**Day 3: Water Quality Database Management**—Training on the California Environmental Data

Exchange Network (CEDEN). CEDEN is a growing statewide cooperative effort of various groups involved in the water and environmental resources of the State of California. This on-line database network is open to federal, state, county and private organizations interested in sharing data throughout the state. SWAMP-comparable data must be entered into CEDEN databases. This day of training will provide background on CEDEN, an introduction to the data entry software and several of the monitoring data entry modules. We plan on covering the following topics during the day:

- CEDEN overview
- SWAMP data entry modules and components:
  - SWAMP comparable field data sheet
  - Chemistry standard formats
  - Toxicity standard formats
  - Status of bioassessment module of the SWAMP database
  - Using SWAMP query files
  - Available resources

**Workshop Registration**—If you are interested in attending days 1, 2, and/or 3 of these workshops, complete the attached registration form and mail it with a check written to the “Sacramento River Watershed Program” for the appropriate amount to:

Mary Lee Knecht  
1714 3<sup>rd</sup> Avenue  
Sacramento, CA 95818

The cost for the workshops are \$50/day. There is a limit of 50 people per day.

If you have questions, please e-mail Mary Lee at [mlknecht@comcast.net](mailto:mlknecht@comcast.net).

**What's Included**—When you attend the workshop you will receive a binder of training information for the day(s) you register and the information on CD. If you sign up for the database management training, you will receive a CD with a copy of the customized SWAMP Access database system. Continental breakfast and lunch will be provided as part of the cost of each workshop.

**Workshop Daily Schedule**—The workshops will start at 9:30 AM each day and end around 4:00 PM. The itineraries for each workshop are still being developed and will be e-mailed to workshop registrants and posted on the SRWP website ([www.sacriver.org](http://www.sacriver.org)) when they are finalized.

## DIRECTIONS

**SRWP - Water Quality Monitoring SWAMP Workshop**

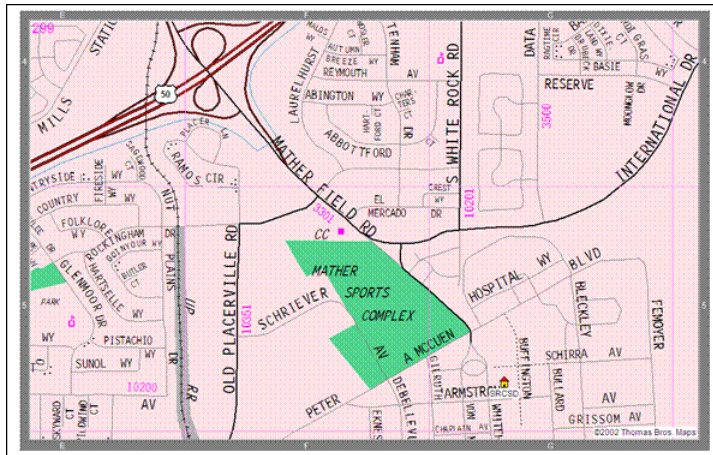
**9:30 - 4:00 Wed. - Fri. September 7 - 9, 2005**

**Sacramento Regional County Sanitation District**

**10545 Armstrong Avenue, Room 170**

**Mather, CA 95655**

**(916) 876-6043, press "0" if it goes to voicemail to get the receptionist.**



The SRCSO offices are located off of Hwy. 50 east of downtown Sacramento.

### From Sacramento Area:

- o Get on Hwy. 50 heading east towards South Lake Tahoe and Placerville
- o About 9 miles from Sacramento, exit at the Mather Field Road off ramp heading south, and stay in the right lane but go straight through the first stoplight (Rockingham Dr.)
- o Continue straight in the right lane as it becomes one way and departs from the main road (International Drive).
- o Also go straight ahead through the 2nd stoplight (Peter A. McCuen Blvd) and you will start around a circle. Drive ahead to the next stoplight (Armstrong Avenue) and turn left.
- o Go 1.5 blocks on Armstrong Avenue, and then turn left into the parking lot of the 2-story building at 10545 Armstrong Avenue. There is a sign at the entrance of the parking lot marking it as a County of Sacramento building.
- o Inside the building, check in with the Security Guard in the lobby or with the receptionist for the Water Quality Division in the 3rd door on your right (or the east side of the building).

## Registration Form

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*9:30 - 4:00, Wed. - Fri. September 7 - 9, 2005*  
Sacramento Regional County Sanitation District  
10545 Armstrong Avenue, Room 170  
Mather, CA 95655

Name:	
Title:	
Agency/Organization:	
Address:	
Daytime phone:	
E-mail:	

In the table below please indicate with an "X" the workshop days for which you are registering. The cost is \$50 each day which includes training materials, continental breakfast, and lunch

Workshop Day	Indicate Registration w/ an "X"
Day 1: Water Quality Monitoring Design and Project Planning	
Day 2: Quality Assurance for SWAMP Comparable Projects	
Day 3: Water Quality Database Management	

Workshop total registration cost = \_\_\_\_ (# of days registered) x \$50 = \_\_\_\_\_

Please mail this registration form with a check written to the "Sacramento River Watershed Program" for the total workshop registration amount to:

Mary Lee Knecht  
1714 3<sup>rd</sup> Avenue  
Sacramento, CA 95818

We will e-mail you confirmation of your registration and further information on the workshops. If you do not receive confirmation by September 2<sup>nd</sup>, contact Mary Lee Knecht at [mlknecht@comcast.net](mailto:mlknecht@comcast.net) or 916-446-6440. Updated information on the workshops can be obtained from the SRWP website: [www.sacriver.org](http://www.sacriver.org).